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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

COOLMAN, VAUGHN

ART UNIT

PAPER NUMBER

3618

DATE MAILED: 08/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/774,408	HUELSEMAN, ULRICH	
	Examiner	Art Unit	
	Vaughn T. Coolman	3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 31, 52, 54, 55, IV-IV (Page 2, Paragraph [0011]), and VII-VII (Page 3, Paragraph [0015]).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities:

Page 3, Paragraph 0018, line 12 – "driving unit 1a" should read "driving unit 1"

Page 4, Paragraph 0022, line 9 – "support halves 47 and 49" should read "support halves 48 and 49"

Appropriate correction is required.

Claim Objections

The claims (6 and 18) are objected to because they include reference characters which are not enclosed within parentheses.

Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the phrase "preferably" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim 9 recites the limitations "the plane of separation", "the first housing part", and "the second housing part" in lines 1 and 2. There is insufficient antecedent basis for these limitations in the claim.

Claim 11 recites the limitation "the starter gear" in line 1. There is insufficient antecedent basis for this limitation in the claim.

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Claims 2-8 and 10-12 have been rejected as depending from a rejected base claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 9, 10, 13-17, 21, 22, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Okui et al (U.S. Patent No. 5,257,674).

[claims 1 and 13] Okui discloses (see FIGS 1-6) a driving unit for a motor vehicle which comprises an internal combustion engine (12) and a housing component (38,) preferably for receiving a clutch (Column 4, lines 32-34), a transmission (36, 37) and a differential (Column 4, lines 44-46), wherein the housing component of the driving unit that receives the clutch and is joined to the internal combustion engine (Column 4, lines 56-60) has a first bearing (inherent) and a second bearing (inherent) for an input shaft (32) as well as an output shaft (36) of the transmission and a third bearing (inherent) for the differential, a container area (62) for a dry sump lubrication of the internal combustion engine is integrated into the housing component. Examiner notes that all modern engine assemblies employ bearings to support rotating shafts.

[claims 2 and 14] Okui further discloses the housing component and a housing structure (Column 4, lines 56-60) of the internal combustion engine are assembled together as separate components on a junction plane (see FIGS 2 and 4).

[claims 3 and 15] Okui further discloses (see FIGS 1 and 2) the input shaft and output shaft being disposed transversely across a longitudinal central plane (inherent) of the passenger automobile.

[claims 4 and 16] Okui further discloses the housing component having a chamber on the side facing the internal combustion engine for the clutch (Column 4, lines 32-36 and FIG 2).

[claims 5 and 17] Okui further discloses the clutch being held in position through the medium of a flywheel on a crankshaft of the internal combustion engine (Column 4, lines 32-36).

[claims 9 and 21] Okui further discloses a plane of separation between a first housing part and a second housing part being relatively upright (see FIGS 2 and 4).

[claims 10 and 22] Okui further discloses the housing component being configured to receive a starter of the internal combustion engine, which cooperates with the clutch (Column 4, lines 32-40).

[claim 25] Okui discloses (see FIGS 1-6) a method for making a driving unit for a motor vehicle, comprising the steps of:

- providing a housing component (16-18) for receiving at least one of a clutch, a transmission (36, 37) and a differential (Column 4, lines 44-46);
- joining the housing component to an internal combustion engine (12) of the vehicle;
- providing the housing component with:
 - a first bearing (inherent),

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- a second bearing (inherent) for an input shaft (32) and an output shaft (36) of the transmission,
- a third bearing (inherent) for the differential,
- a container area (62) for a dry sump lubrication of the internal combustion engine

Examiner notes that all modern engine assemblies employ bearings to support rotating shafts, examples of which can be found throughout the references cited by the examiner on form PTO-892.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-8 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okui et al in view of Kameda et al (U.S. Patent No. 5,186,078).

[claims 6 and 18] Okui discloses all of the elements of the claimed invention as described above except for explicitly disclosing the housing component being assembled from a first and a second housing part, wherein the first housing part includes the first bearing of the input shaft and the third bearing of the differential, and the second housing part forming together with the first housing part the second bearing for the output shaft.

Kameda teaches (FIGS 8-12) a driving unit (200) including a housing component (174 and 176) that receives a clutch, a transmission, and a differential wherein the

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housing component comprises a first housing part (174) for a first bearing of an input shaft (123) and the third bearing of the differential (142R), a second housing part forming together with the first housing part the second bearing for the output shaft (122). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the driving unit shown by Okui with the housing component as taught by Kameda, since such a modification would provide the advantage of, according to Kameda, of simplifying the machining processes of the driving unit (Column 4, lines 1-10).

[claims 7 and 19] Kameda further shows the second bearings being formed by bearing halves of the first housing part and of the second housing part (shown in FIGS 1 and 12).

[claims 8 and 20] Kameda further shows the bearing halves are provided on both sides of a plane of separation at which the first housing part and the second housing part are assembled (shown in FIGS 1 and 12).

Claims 11 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okui et al in view of Okazaki (U.S. Patent No. 4,920,825).

[claims 11 and 23] Okui discloses all of the elements of the claimed invention as described above except for the starter with the starter gear being introduced into the housing through a side wall to cooperate with a sprocket of the clutch. Okazaki teaches (FIG 13 and column 10, lines 25-68) a starter (167) with a starter gear (170) being brought through a side wall of a housing assembly (shown in FIG 13), and the starter gear cooperating with a sprocket (172) of the clutch (179). It would have been obvious to one

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having ordinary skill in the art at the time the invention was made to modify the driving unit shown by Okui with the starter configuration as taught by Okazaki, since such a modification would provide the advantage of protecting the starter gear and sprocket from external debris.

Claims 12 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okui et al in view of Giacosa (U.S. Patent No. 3,302,740).

[claims 12 and 24] Okui discloses all of the elements of the claimed invention as described above except explicitly stating that the housing component is provided on a side facing away from the internal combustion engine with at least one support bracket for the mounting of a driving unit. Giacosa teaches (see FIGS 1-4) a housing component (17, 18) connected to an internal combustion engine (12) wherein the housing component is provided on a side facing away from the internal combustion engine with at least one support bracket (20) for the mounting of a driving unit.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Boyd (U.S. Patent No. 3,555,930), Ganz (U.S. Patent No. 1,989,446), Okubo (U.S. Patent No. 4,682,516), Aronson (U.S. Patent No. 2,448,345), and Mayer (U.S. Patent No. 1,473,194) teach a transmission unit for a vehicle having input and output shafts that are transverse to a longitudinal central plane of the vehicle.

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Unfried et al (U.S. Patent No. 6,981,566 B2) and Fischle et al (U.S. Patent No. 5,454,443) teach a housing component coupled to an ICE having a bracket for mounting a driving unit located opposite the ICE.

Kazama et al (U.S. Patent No. 5,014,812) teaches a relatively upright plane of separation between two housing components of a vehicle.

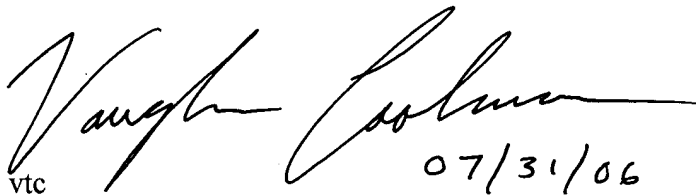
Schmuck (U.S. Patent No. 4,267,805) teaches a vehicle including a flywheel on the crankshaft of an ICE holding a clutch of the vehicle in position.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vaughn T. Coolman whose telephone number is (571) 272-6014. The examiner can normally be reached on Monday thru Friday, 8am-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Ellis can be reached on (571) 272-6914. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



vtc 07/31/06

Travis Coolman
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